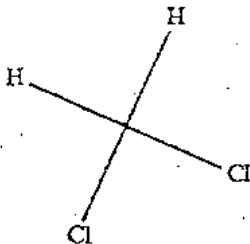


APPENDIX H

ENVIRONMENTAL FATE SUMMARY INITIAL REVIEW EXPOSURE REPORT

INITIAL REVIEW EXPOSURE REPORT		000075-09-2		Page 1 of:	
Assessor:			Search ()Y		Focus Date:
- SAT	Health:			Focus Rep:	
	Eco:			SAT Rep:	
Submitter:			Max. PV		Manuf.
			(kg/yr)		Import
Use: PRINTING INKS CLUSTER					
Consumer Exposure		()no,			
		()yes, see consumer exp. page			
Analog/Comments				CBI STAMP	
Chemical Name: DICHLOROMETHANE					
Trade Name:					
Structure:					
					
EBR CRITERIA					
Surface dw ()y ()n			Total rel ()y ()n		
Ground dw ()y ()n			Water rel ()y ()n		
Ambient Air ()y ()n			Consumer ()y ()n		

INITIAL REVIEW EXPOSURE REPORT				000075-09-2		Page 2 of:	
STATE	NEAT	CLEAR, COLORLESS VOLATILE LIQUID					MW CHK
	MFG						84.93
MOL WT	84.93	% < 500		FORM	C H2 Cl2		
METHOD		% < 1000		CAS			
PROPERTY	Submitted	ICB-CRSS		Method/Ref	PCGems/EPI		
MP (C)	-97.00 - -97.00				-97.00		
BP (C)	40.00	@ 760 torr			26.37	@ 760 torr	
@ P (torr)							
VP (torr)	340.00			@ 20 C	7.23E+02		
S-H2O (g/L)	17.00				16309.850	mg/L	
S-Org (g/L)						mg/L	
Log Kow	1.25				1.25		
pH, pKa				Log Koc	1.38		
Light Absorption (nm)	$\lambda > 290$	No light absorption		Log BCF	BCF	0.72	
Solvent:	at $\lambda > 290nm$			H (atm m3/mol)		3.01E-03	
HYDRO t(1/2) @ pH 7, 25 C	1000.00	da		AERUD			
Volatilization (H2O) t(1/2)		River	1.12	hr	Lake	3.73	da
AOP t(1/2) (hr)	OH	1061.09	O3		Total		
BIODEG	Linear Prob:	0.49	Nonlinear Prob:	0.14	Survey Ult:	WK-MO	Survey Prim: DA-WK
STP (% Removal)	Tot	55.10	Biod	0.05	Ads	0.99	Air
							54.06
REMOVAL IN WWT/POTW	% Overall	see below	0	25	50	75	90
							=> 99
		CATEGORY					
	RATING	1	2	3	4		
Sorption		low	moderate	strong	v.strong		
Stripping		extensive	moderate	low	negligible		
Biodegradation	Removal	unknown	high	moderate	negligible		
	Destruction	unknown	complete	partial			
Comments:							
AEROBIC BIODEGRADATION	Ultimate		<= days	weeks	months	> months	
	t(1/2)	Primary	<= days	weeks	months	> months	
Comments: BIODEG survey model gives reasonable results.							

ENVIRONMENTAL FATE SUMMARY INITIAL REVIEW EXPOSURE REPORT

INITIAL REVIEW EXPOSURE REPORT				000075-09-2		Page 3 of:	
				CATEGORY			
				RATING	1	2	3
ANAEROBIC BIODEGRADATION		Ultimate		<= days	weeks	months	> months
		Primary		<= days	weeks	months	> months
Comments: Primary probably faster, due to dehalogenation.							
HYDROLYSIS		A. C-Cl	4	<= mins	days	months	=> years
(pH 7, 25 C)		B.		<= mins	days	months	=> years
Comments: A. $t_{1/2} = 700 \text{ years}$							
SORPTION TO SOIL & SEDIMENT				v. strong	strong	moderate	low
Comments:							
MIGRATION TO GROUND WATER				negl	slow	moderate	rapid
Comments: Classic GW pollutant.							
VOLATILIZATION		Rivers		negl	slow	moderate	rapid
(w/ sediment)		Lakes		negl	slow	moderate	rapid
Comments:							
PHOTOLYSIS		A. Direct	1	negl	slow	moderate	rapid
		B. Indirect	1	negl	slow	moderate	rapid
Comments: $t_{1/2} > 1 \text{ year}$ for both processes							
ATMOSPHERIC OXIDATION		A. OH	2-3	negl	slow	moderate	rapid
		B. O3	1	negl	slow	moderate	rapid
Comments: * A. $t_{1/2} = 88 \text{ days}$ B. No ozone reaction possible $\text{avg } k_{OH} = 4.7 \times 10^{-14} \text{ s}^{-1}$ $t_{1/2} = 25 \text{ days}$ at $k_{OH} = 1.5 \times 10^{-6} \text{ s}^{-1}$ + a 12-hour day light day							